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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
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EXAMINER

SLOAN, NATHAN A

ART UNIT PAPER NUMBER

2614

DATE MAILED: 02/04/2003

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary

Application No.

09/526,628

Applicant(s)

FRIES ET AL.

Examiner

Nathan A Sloan

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-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133).
- Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 14 March 2000.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-37 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☐ Claim(s) 1-37 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on _____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
- Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
- 11) ☐ The proposed drawing correction filed on _____ is: a) ☐ approved b) ☐ disapproved by the Examiner.
- If approved, corrected drawings are required in reply to this Office action.
- 12) ☐ The oath or declaration is objected to by the Examiner.

Priority under 35 U.S.C. §§ 119 and 120

- 13) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
- ☐ Certified copies of the priority documents have been received.
 - ☐ Certified copies of the priority documents have been received in Application No. _____.
 - ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
- * See the attached detailed Office action for a list of the certified copies not received.
- 14) ☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. § 119(e) (to a provisional application).
- a) ☐ The translation of the foreign language provisional application has been received.
- 15) ☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. §§ 120 and/or 121.

Attachment(s)

- 1) ☒ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) ☒ Information Disclosure Statement(s) (PTO-1449) Paper No(s) 3.
- 4) ☐ Interview Summary (PTO-413) Paper No(s) _____.
- 5) ☐ Notice of Informal Patent Application (PTO-152)
- 6) ☐ Other:

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DETAILED ACTION

Claim Rejections - 35 USC § 102

1. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(e) the invention was described in (1) an application for patent, published under section 122(b), by another filed in the United States before the invention by the applicant for patent or (2) a patent granted on an application for patent by another filed in the United States before the invention by the applicant for patent, except that an international application filed under the treaty defined in section 351(a) shall have the effects for purposes of this subsection of an application filed in the United States only if the international application designated the United States and was published under Article 21(2) of such treaty in the English language.

2. Claims 1-7, 12, 15-19, 22-26, 29-30, and 33-37 are rejected under 35 U.S.C. 102(e) as being anticipated by Ko (6,486,925).

Ko (6,486,925) teach a system and method for managing channels with digital and analog television signals. Users are allowed to select from channels that are provided from multiple sources and assembled into a single channel map.

With respect to claims 1, 15, 23, and 33, the claimed method for tuning to a channel from among multiple broadcast types without having to designate the broadcast type is taught by the tuning system seen in Figure 3 receiving broadcast signals from multiple tuners 41, 51, and 61 and combining the signals using controller 30. As taught in column 2, lines 46-50 this system allows automatic switching to a channel regardless of broadcast type, meeting the claimed “without having to designate broadcast type.”

The claimed computer readable medium for providing executable code is met by the

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controller 30, which inherently contains executable code to produce control signals and tables such as Table 1 seen in column 5. The claimed step of “storing a plurality of service records, each service record containing tuning information for tuning to a channel of one of the plurality of broadcast types” is taught in column 4, lines 61-67 and column 5, lines 1-6. The service records are taught in column 5, lines 36-41 to be categorized into service spaces by grouping tuning information based on the broadcast type. A user may then select a channel from among broadcast types, claimed “receiving a selection of one of the service records in one of the service spaces” and the channel is then tuned to by controller 30 using the stored tuning information accessed from memory 20. This process is taught in column 2, lines 58-67 and column 3, lines 1-4, and is better understood with reference to Figure 6.

With respect to claims 2, 16, 24, and 34, the claimed storing information that identifies a tuner is taught in column 6, lines 11-17 by identifying broadcasting channels using ordered channel numbers within a table stored in memory 20. A network ID is also used to distinguish between the types of broadcast, which identifies one of tuners 41, 51, or 61 of Figure 3 for reception of the selected channel. Channel information including tuning frequency and program number are also stored as noted above with each record, meeting the claimed “storing information that identifies a channel tunable by the tuner.”

With respect to claims 3, 17, 25, and 35, the claimed accumulating a plurality of service records is met by obtaining a plurality of service records, using the process seen in Figure 4 to create a table in memory, seen in column 5.

With respect to claims 4-6, 18, and 26 the claimed monitoring a broadcast to determine available channels, creating service a service record for each available channel

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if it does not already exist, and including information that a tuner can use to tune to the channel in the service record is seen in Figure 4 with steps S12-15. Ko teaches monitoring the various broadcasts with tuners and creating a channel map as seen in column 5 and Figure 5. This channel map stores tuning information used to tune the various tuners to a channel selected by a viewer.

With respect to claim 7, Ko teaches using controller 30 to monitor channels, create service records, and include tuning parameters used to tune to a new channel. The claimed "loader" is met by the controller 30, which as seen in Figure 5 stores tuning information into memory from various broadcasts and is provided for each tuner as claimed. The claimed "master service control" is also met by the controller 30, which works with de-multiplexing CPU 42a of Figure 5 to create new service records for channels as claimed.

With respect to claim 12 and 30, the claimed "tuning to a selected digital channel" using tuning information within a service record is taught by Ko. As seen in Figure 3 and noted above, Ko teaches a digital ground tuner 61 that is used to store service records in memory 20 and tune to a channel requested by a user using the information stored in memory 20.

With respect to claim 19 and 22, the claimed tuning system for tuning to a plurality of different broadcast types is met by the tuning system seen in Figure 3. The claimed first and second tuners for tuning to channels of different broadcast types are met by tuners 41 and 51. The claimed memory is met by memory 20, and the claimed controller coupled to the memory is met by controller 30. As taught in column 4, lines 61-67 and column 5, lines 1-6 the controller is used to create a table of service records

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containing tuning information for channels of various broadcast signals. This overall service space is seen as a table is seen in column 5, and is divided by regions into a plurality of service spaces corresponding to the broadcast type. As seen in Figure 4, an analog signal is searched and stored at S12, followed by a cable broadcast signal at S13, and continuing with other broadcast types. This process meets the claimed storing tuning information with each “service space listing at least one of the plurality of service record.”

With respect to claim 29, the claimed “including a plurality of service records of a plurality of broadcast types within a single service space” is met by obtaining a plurality of service records, using the process seen in Figure 4 to create a single table in memory 20, seen in column 5.

With respect to claim 36, Ko teach the claimed “receiving tuning information regarding an available channel over a broadcast, creating a service record for the available channel, and including the tuning information in the service record” in Figure 4. Broadcast streams are monitored to search for signals and extracted tuning information for tuning to broadcast channels is stored in memory. As noted above, the tuning information for each channel is stored as records in a table as seen in column 5.

With respect to claim 37, the claimed broadcast including “information regarding available channels corresponding to a plurality of broadcast types” is met by the various tuning information that is received from a plurality of broadcasts to tuners 41, 51, and 61 of Figure 3. As taught in column 4, lines 64-67 and column 5, lines 1-6 the broadcasts include tuning information corresponding to their broadcast types. A network ID is used to distinguish between the various broadcast types, taught in column 6, lines 5-12.

Claim Rejections - 35 USC § 103

3. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

4. Claims 8-11, 13-14, 20-21, 27-28, and 31-32 are rejected under 35 U.S.C. 103(a) as being unpatentable over Ko (6,486,925) and in view of DeFreese et al. (6,493,876).

With respect to claims 8, 9, 20, 21, and 27 Ko does not explicitly teach the use of “a pointer associated with the service record in at least one of the service spaces” or “creating a master service space that includes pointers to all of the plurality of service records.” As noted above, Ko does teach the use of a table for storing information but not the use of pointers as claimed. Examiner notes that the use of pointers for linking information in databases is notoriously well known in the art. DeFreese et al. teach a system and method for full service cable television system, including the ability to receive broadcasts from a plurality of providers and create a master service record. As seen in Figure 5 of DeFreese, the claimed pointers are explicitly taught from a channel table to the service table. The service table is comprised of records that include further pointers to link information regarding their source for tuning. It would have been obvious for one skilled in the art at the time of the invention to modify the data storing

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techniques taught by Ko by using pointers in order to provide a flexible architecture that is easily updated.

With respect to claims 10, 11, and 28, Ko does not teach “categorizing at least some of the plurality of service records into service spaces that are categorized according to content,” or “an act of creating a favorites space for including service records that correspond to desirable channels.” DeFreese teaches the use of a subscriber favorite line-up stored in memory in column 17, lines 62-63. As seen in Figure 15, users may categorized channels into a variety of groups such as blocked or favorite channels. It would have been obvious for one skilled in the art at the time of the invention to modify the channel map storing techniques of Ko by allowing the creation of a favorite space as taught by DeFreese in order to allow the viewer quick access to their favorite shows.

With respect to claims 13, 14, 31, and 32, Ko does not teach storing a service record corresponding to a web page, or storing uniform resource identifier as tuning information for the web page. DeFreese et al. (6,493,876) teach in column 16, lines 21-34 creating a service table comprising services from various sources, including the world wide web. In column 18, lines 5-20 DeFreese et al. further teach that the world wide web address may be identified and tuned to by storing a uniform resource locator. It would have been obvious for one skilled in the art at the time of the invention to modify the techniques taught by Ko by including internet links to provide the user with convenient internet access over existing broadband connections.

Conclusion

5. The prior art made of record and not relied upon is considered pertinent to applicant's disclosure.

Eyer et al. (5,982,411) teach a navigation system to group and present channels with different sources to viewers.

Hofmann (5,883,677) teach a system and method for receiving and organizing program information from multiple interfaces. A database corresponding to each tuner is created and then a single master database is formed by merging the database for each tuner. Viewers are allowed to search and categorize programs for viewing.

Klosterman (5,828,945) teach a system for merging television schedule information received from multiple sources.

Stinebruner (6,133,910) teach a video system using a virtual tuner that integrates signals from multiple video sources. A controller is provided to managing grouping and automatic switching between sources based on selected television programs.

Usui et al. (6,305,018) teach a system that merges multiple electronic program guides from various sources into a single EPG to be presented to viewers.

Wugofski (6,321,382) teach a system for resolving channel selection in a multi-source system.

Williams et al. (6,157,411) teach a system and method for forming a single database of program information based on tuning data received from multiple sources.

Schneidewend et al. (6,182,287) teach a video decoder that allows users to create a favorites space comprising their favorite broadcast streams.


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Nishikawa et al. (6,348,932) teach a web tv receiver that shows internet web sites with the EPG, performs periodic updating, and allows for a viewer favorites category.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Nathan A Sloan whose telephone number is (703)305-8143. The examiner can normally be reached on Monday-Friday from 8:00AM to 6:00PM.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, John Miller, can be reached on (703) 305-4795. The fax phone number for the organization where this application or proceeding is assigned is (703)308-5399.

Any inquiry of a general nature or relating to the status of this application or proceeding should be directed to the receptionist whose telephone number is (703)308-3900.


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